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ABSTRACT

This document summarizes information about attrition, graduation, and graduation with honors at Hollins and other College Research Center (CRC) member colleges; calls attention to the fact that increasing percentages of entering freshmen are saying that the chances of their transferring to another college are "very good"; examines the academic qualifications of students who withdraw, who graduate, and who graduate with honors; and presents selected findings from analyses of freshman-survey responses for four subgroups of students entering Hollins in 1965 (Class of 1969) namely, "early withdrawals" (after first year), "later withdrawals" (Sophomore year or later), "graduates with low grade point averages," and "graduates with honors." (Author)

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COLLEGE RESEARCH CENTER
For Interinstitutional Cooperation in Institutional Research

In affiliation with
EDUCATIONAL TESTING SERVICE
Princeton, N. J.

# NOTES ON ATTRITION

July 1, 1971

Kenneth M. Wilson

HE 004 846

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
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# PREFACE

Evidence from Center studies indicates that at one time or another most students at CRC-member colleges give serious thought to the possibility of leaving the college of original registration even though from 60 to 80 percent of each class graduates on schedule. College ties are less strong than in the past. The prospect of leaving the college of original registration, probably to continue one's education elsewhere, is less threatening to today's students than for their predecessors because the idea is more generally acceptable. Moreover, colleges are making it possible through exchange and off-campus programs for students who wish to do so to take some of their formal undergraduate work at other institutions. In the circumstances the problem of student attrition is a matter of continuing concern to many colleges, especially smaller, privately-supported institutions whose losses due to attrition are seldom fully offset by transfers from other colleges.

This is a consolidation of two memoranda* prepared as working documents for the Attrition Study Committee at Hollins College. The report of the Chairman of that Committee is also included. Evidence is presented regarding the incidence of attrition at CRC-member colleges and selected characteristics of students who withdraw. Recommendations for institutional action related to the problem of attrition are also included.

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*Notes on Attrition, CRC Memorandum, February 12, 1971.
Notes on Attrition: Part 2, CRC Memorandum, April 2, 1971.

COLLEGE RESEARCH CENTER AT ETS

Princeton, New Jersey 08540

To: Hollins College

From: Kenneth M. Wilson
College Research Center

Date: February 12, 1971

Subject: Notes on Attrition

This memorandum is in response to a request by the college for information which might be useful in assessing observed patterns of attrition at Hollins--a request prompted in part by the fact that an atypically high proportion of students in the Class of '72 withdrew, many without formal notification of intent, following the sophomore year.

Several Center reports and memoranda have dealt with the attrition problem and may usefully be reexamined, as follows:

> Review of Center Studies: I--Studies of Student Retention and Withdrawal (CRC RESEARCH MEMORANDUM 65-7, 29 December 1965)
>
> Review of Center Studies: IV--Some Concomitants of Withdrawal from College: Brief Report of a Questionnaire Survey (CRC RESEARCH MEMORANDUM 67-1, 15 February 1967)
>
> Student Attrition at CRC-Member Colleges (CRC RESEARCH MEMORANDUM 70-1, 16 April 1970)
>
> Class of 1970--Attrition, Graduation, Honors, and Major Field at Graduation (CRC MEMORANDUM, 26 August 1970)

Studies by Woods* of the Classes of 1959-1962 at Hollins revealed that attrition claimed almost half these Classes (47 percent). By the Class of

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*Paul J. Woods, Correlates of Attrition and Academic Success, in K. M. Wilson, (Ed.), Research Related to College Admissions (Atlanta, Ga.: Southern Regional Education Board, 1963), pp. 89-105.

1966, attrition had declined to less than 30 percent, and less than a fourth of the Class of 1968 withdrew from Hollins prior to graduation (CRC Memo, 26 August 1970).

However, Class of 1969 and 1970 attrition figures at Hollins were over 30 percent, and present concern is based on evidence that figures for the Class of 1972 are even higher, approaching 35 percent based on only two years of experience.

The Class of '68 was more "persistent" than earlier classes at Hollins and all other CRC-member colleges. In many ways, it appears that the Class of '68 was a "watershed" class for CRC-member colleges. The years spanned by that Class were marked by the beginning of dramatic changes in attitudes toward coeducation, and basic social and socioeconomic changes. These changes have affected the college choices of both boys and girls.*

The present memorandum (a) summarizes information about attrition, graduation, and graduation with honors at Hollins and other CRC-member colleges; (b) calls attention to the fact that increasing percentages of entering freshmen are saying that the chances of their transferring to another college are "very good;" (c) examines the academic qualifications of students who withdraw, who graduate, and who graduate with honors, respectively, at Hollins and other CRC-member colleges; and (d) presents selected findings from analyses of freshman-survey responses for four subgroups of students entering Hollins in 1965 (Class of 1969) namely, "early withdrawals" (after first year), "later withdrawals" (sophomore year or later), "graduates with low grade point averages," and "graduates with honors."

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*For relevant current information and trend data see CRC Memorandum, Students Entering CRC-Member Colleges: Changes in Academic Qualification, Attitudes Toward Sexually Segregated Education, and Selected Factors in Choice of College (CRC, 3 February 1971).

Attrition: Context and Perspective

I. Comparative data on attrition, graduation, and graduation with honors for Hollins and other CRC-member colleges in recent years are shown in Table 1.

Estimated attrition for Hollins' Class of '72 as of the end of the sophomore year is approximately 35 percent.

An upward trend in attrition at Hollins may be indicated by the data in Table 1. The situation at other CRC-member colleges through the Class of '70 suggests either stability or some reduction in attrition over the period spanned by the Classes of 1966 through 1970.

II. We do not know the predictive value of students' statements about the probability that they will transfer to another college. However, the data in Table 2, from ACE Freshman Surveys in recent classes, indicate that increasingly higher percentages of students entering CRC-member colleges are saying that the chances of transferring to another college are "very good."

For Hollins, the lowest percentage of self-designated, transfer-oriented freshmen was in 1968. However, it is quite possible that interaction of students entering in 1968 with their successors in the classes entering in 1969 and 1970 (both with higher incidence of transfer-oriented students) might be as important as the initial orientation of these students in accounting for the increased incidence of attrition in the Class of '72.

In pursuing this thesis, the incidence of attrition in the Class of '71 should be considered. This Class would have been sufficiently advanced to resist contagion (i.e., past their sophomore year) by the time the transfer-oriented freshmen of '72 and '73 arrived on the scene.

Hence, attrition for '71 might be on a par with or lower than attrition for say, '69 or '70. In any event, attrition for the Class of '71 should be considered as part of the total picture.

III. Contrary to trends at several CRC-member colleges, the proportion of students awarded degrees with honors has remained relatively low (around 10 percent), at Hollin's and Randolph-Macon Woman's College in recent classes, as may be seen in Table 1. Selected data from Table 1 for the Classes of

Table 1. Four-Year Graduation and Attrition Rates for Recent Classes

| | Experience | Scheduled year of graduation | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1972 | 1971 | 1970 | 1969 | 1968 | 1967 | 1966 | 1965 | 1964 |
| Mount Holyoke | Withdrawn | | | 14.4 | 19.7 | 16.8 | 17.2 | 20.6 | | |
| | Graduated | | | 82.8 | 76.4 | 80.0 | 80.5 | 77.7 | | |
| | Honors | | | (30.1) | (21.3) | (21.5) | (24.6) | (14.8) | | |
| | Regular | | | (52.1) | (55.1) | (58.5) | (55.9) | (62.9) | | |
| | Other | | | 3.4 | 3.9 | 3.1 | 2.2 | 1.8 | | |
| Vassar | W--Withdrawn | | | | [illegible] | 16.7 | 22.0 | [illegible] | | |
| | Graduated | | | | [illegible] | 81.0 | 76.8 | 75.3 | | |
| | Honors | | | | (34.2) | (25.8) | (23.9) | (20.9) | | |
| | Regular | | | | (43.4) | (55.2) | (51.9) | (54.4) | | |
| | Other | | | | 4.1 | 3.3 | 1.3 | 4.1 | | |
| Wheaton | C--Withdrawn | | | 33.7 | 30.5 | 28.5 | 31.3 | 35.0 | | |
| | Graduated | | | 75.6 | 69.2 | 73.1 | 67.3 | 63.6 | | |
| | Honors | | | (33.1) | (27.0) | (10.7) | (12.8) | ( 9.7) | | |
| | Regular | | | (42.5) | (41.2) | (62.4) | (54.5) | (53.9) | | |
| | Other | | | 0.8 | 1.3 | 1.3 | 1.5 | 1.4 | | |
| Trinity | J--Withdrawn | | | | | 29.3 | 27.2 | 29.8 | | |
| | Graduated | | | | | 69.5 | 72.2 | 68.9 | | |
| | Honors | | | | | (11.7) | ( 9.2) | ( 9.9) | | |
| | Regular | | | | | (57.8) | (63.0) | (59.0) | | |
| | Other | | | | | 1.2 | 0.6 | 1.2 | | |
| Connecticut | C--Withdrawn | | | 25.6 | | 26.0 | 32.2 | 30.5 | | |
| | Graduated | | | 71.0 | | 70.5 | 65.9 | 68.3 | | |
| | Honors | | | (24.1) | | (14.9) | ( 9.1) | ( 9.4) | | |
| | Regular | | | (46.9) | | (55.6) | (56.8) | (58.9) | | |
| | Other | | | 3.4 | | 3.6 | 2.0 | 1.2 | | |
| R-MWC | H--Withdrawn | | | 38.6 | 39.6 | 36.9 | 42.9 | 41.4 | | |
| | Graduated | | | 59.6 | 59.3 | 60.8 | 56.7 | 56.9 | | |
| | Honors | | | (11.0) | (10.4) | (14.5) | ( 9.9) | ( 8.0) | | |
| | Regular | | | (48.6) | (48.9) | (46.3) | (46.8) | (48.9) | | |
| | Other | | | 1.7 | 1.1 | 2.3 | 0.4 | 1.6 | | |
| Hollins | D--Withdrawn | 35.0 | ---- | 31.0 | 31.9 | 23.3 | 28.0 | 28.3 | | |
| | Graduated | | | 66.5 | 66.0 | 74.3 | 69.0 | 68.6 | | |
| | Honors | | | (10.4) | (11.6) | (13.9) | (11.9) | ( 8.9) | | |
| | Regular | | | (56.1) | (54.4) | (60.5) | (57.1) | (59.7) | | |
| | Other | | | 2.4 | 2.1 | 2.2 | 3.0 | 3.1 | | |

Note: This table reports percentages (base = no. first-time freshmen), by class, in various experience categories. Thus, for example, at College A, for the Class entering in 1965 (Class of '69), the record in June 1969 was 19.7% withdrawals, 76.4% graduated, and 3.9% continuing or on leave. It is likely that a majority of withdrawing students continue their education elsewhere.

*Colleges are identified by CRC letter code, adopted in May 1965.

Table 2. Percentage of Entering Students Who Estimate That Chances of Transferring to Another College Are Very Good, CRC-Member Colleges, Classes Entering in 1967, 1968, 1969, and 1970

| College | Year of ACE Freshman Survey | | | |
|---|---|---|---|---|
| | 1967 | 1968 | 1969 | 1970 |
| Briarcliff | 31 | 36 | 42 | 45 |
| Randolph-Macon Woman's | 14 | 14 | N.D. | 20 |
| Vassar | 10 | 8 | 16 | 10 |
| Hollins | 10 | 8 | 13 | 17 |
| Trinity | 7 | 5 | 9 | 11 |
| Connecticut | 7 | N.D. | 10 | 5 |
| Mount Holyoke | 5 | 7 | 8 | 8 |
| Wheaton | 5 | 4 | 12 | 14 |
| Nonsectarian women's colleges | 21 | 19 | 15 | 18 |
| Women, nonsectarian liberal arts | 15 | 14 | 13 | 14 |

Note: Estimates for women by college categories are from: American Council on Education, National Norms for Entering College Freshmen, 1967, 1968, 1969, and 1970 editions.

1966 and 1970 are shown below:

| College | Percent with honors Class of '70 | Class of '66 |
|---|---|---|
| Hollins | 10 | 9 |
| R-MWC | 11 | 8 |
| Mount Holyoke | 30 | 15 |
| Vassar | 34 (1969) | 21 |
| Wheaton | 33 | 10 |
| Connecticut | 24 | 9 |
| Trinity | 12 (1968) | 10 |
| Briarcliff | No data | No data |

In evaluating the possible relevance of this for attrition, consideration should be given to the fact that the academic qualifications of entering students at Hollins increased steadily during the 1950's and early 1960's but that this improvement in the qualifications of entering students was not taken into account in (a) assigning grades for work in courses or (b) making judgments about proportion of a given class which "should be" awarded degrees with honors.*

Increases in academic qualifications of successive entering classes without corresponding modifications in "grading practices" means ever increasing intensification of grading standards--it becomes harder to earn a given grade. The Hollins experience in this regard is illustrated in Figure 1. In terms of verbal ability and measured achievement, for example, the typical student in the Class of '67 was better qualified than almost 90 percent of her predecessors in the Class of 1962, yet she earned about the same grade during her freshman year. The cumulative effect of continued increases in grading standards may well be a factor in the increasing resistance of students in selective colleges to traditional grading practices.

IV. Center studies of attrition in classes of several years ago provide a basis for several generalizations about the relationship between students' academic qualifications and attrition.

A. Within a college, the likelihood of a student's graduating on schedule with her Class does not appear to be a function of her academic aptitude and level of measured achievement in secondary school subjects.

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*See CRC RM66-3, Increased Selectivity and Institutional Grading Standards, 18 November 1966. See also College and University, Volume 46, Fall 1970, pp. 46-55.

HOLLINS COLLEGE

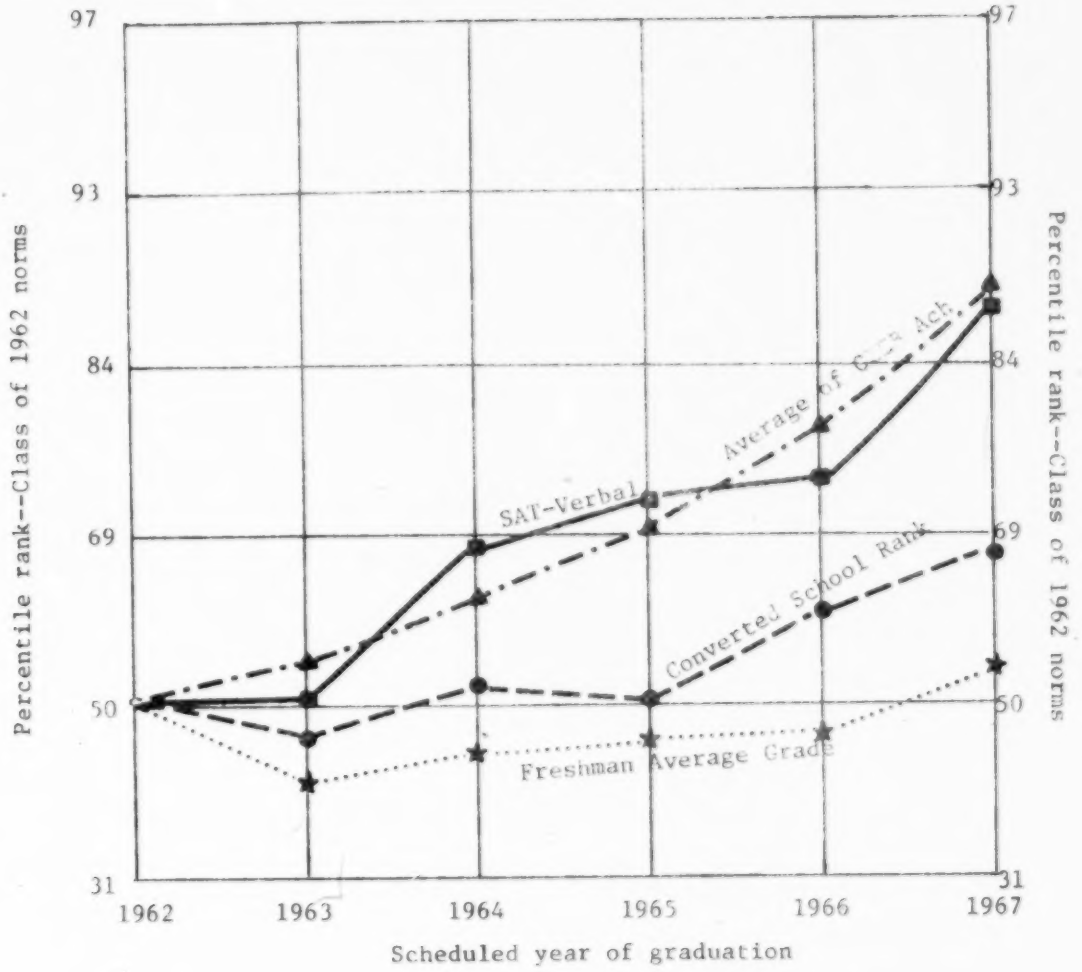


Figure 1. Standing of the Average Student, Class of 1963 through 1967, Respectively, Relative to Class of 1962 Norms for Selected Measures of Academic Potential and College Achievement

B. Among colleges, graduation rates tend to be at least partially a function of general level of academic aptitude and achievement in the student body--graduation rates tend to increase as general aptitude level of the student body increases.

C. Among graduating groups within each college, students with superior records of academic accomplishment (e.g., in top quarter of their respective classes based on four-year averages) tend to be distinctly superior in all elements of the admissions battery (SAT-V, SAT-M, Average of CEEB Achievements, and Converted School Rank) to their lower-achieving classmates or to their classmates who withdraw. However, dropouts tend to have better "admissions-battery qualifications" than their classmates who persist through graduation but with relatively low academic records.

Data for more recent Classes, namely, the Classes of 1969 and 1970, summarized in Table 3, indicate that these generalizations are still applicable at Hollins College. Moreover, it appears that in the Class of 1970 withdrawing students, especially those withdrawing at or before the end of the freshman year, had higher "admissions-battery qualifications" than all graduates in that year.

In order to provide interinstitutional perspective on this particular question--i.e., differences in the general academic characteristics of withdrawing and graduating groups--an analysis has been made of data for five CRC-member colleges (all colleges providing follow-up data on the Class of 1969). Three groups were identified at each college, namely, graduates with honors, all other graduates, and students who withdrew officially.

In addition to SAT-Verbal, SAT-Mathematical, Converted Rank, and the average of CEEB achievements (the standard admissions battery), information from the Personal Values Inventory (a self-report inventory) was available for these groups, as follows:

Persistence -- students scoring high on this scale think of themselves as good producers in school, as studious and efficient in the production of school work, as hard workers, etc.; low scorers tend to have opposite views in these areas.

Table 3. Selected Characteristics of Withdrawing and Graduating Groups, Hollins College, Classes of 1969 and 1970

| Characteristic | Class of 1970 | | | Class of 1969 | | | |
|---|---|---|---|---|---|---|---|
| | Withdrew | | Graduated | Withdrew | Graduated | | |
| | Early | Late | | | No hon. | Honors | Total |
| Mean values: | | | | | | | |
| Converted Rank | 58.0 | 57.4 | 57.7 | 58.7 | 56.8 | 66.3 | 58.3 |
| SAT-Verbal | 61.5 | 58.8 | 57.3 | 58.9 | 57.0 | 62.1 | 57.8 |
| SAT-Mathematical | 57.6 | 57.3 | 56.0 | 57.1 | 57.1 | 58.0 | 57.2 |
| Achievement Average | 60.5 | 58.5 | 57.3 | 56.6 | 56.2 | 60.3 | 56.8 |
| PVI Persistence * | | | | 18.4 | 17.2 | 23.6 | 18.2 |
| Predictive Composite ** | 51.7 | 49.6 | 48.0 | 48.7 | 46.8 | 56.9 | 48.4 |

* Score on a scale labelled "persistence" from the Personal Values Inventory. This 30-item, self-report scale predicts freshman-year grades at Hollins as accurately as the Converted Secondary School Rank. CRC Research Memorandum 66-2, 13 June 1966, "Validity of a Measure of Academic Motivation," Tables 3, 6, 7, 8, and 9.

** A linear combination of Converted School Rank, CEEB Achievement Average, SAT-Verbal, and SAT-Mathematical, with major weighting on Rank and Achievement. This is a General index of "academic potential."

Deliberateness-Self Control--students scoring low on this scale tend to reject academic values and substitute youth-culture values for them. High scorers tend to think of themselves as cautious rather than rash, youth culture resistant versus delinquency prone, etc.

Home --student reports on how her parents feel about her persistence and self control. (e.g., My parents regard me as a hard worker.)

These scores are related to achievement at CRC-member colleges and provide unique information about the academic-performance prospects of students (i.e., information which is not already provided in the standard admissions battery).

Scores on the standard admissions battery and the three PVI scores for Honors, Graduated, and Withdrawn groups at Hollins, Mount Holyoke, Vassar, Wheaton, and Randolph-Macon Women's Colleges, respectively, were analyzed in such a way as to determine how the several groups (15 in all) differed with respect to their levels and patterns of scores on the variables.

Results of the analysis revealed that 87 percent of the differences among the 15 college progress groups could be accounted for by one linear combination of the seven variables, while a second linear combination accounted for some 6 percent of the differences.

The first linear function (called a discriminant function) involved heaviest weights for the CEEB Achievement Average, School Rank, Deliberateness-Self Control, and SAT-Verbal--students scoring high on this dimension would tend to have higher ability and motivation for academic achievement than low-scorers. The second discriminant function assigns high positive weight to the CEEB Achievement Average with high negative weights for School Rank and Persistence. Thus, students with high measured achievement but with low Secondary School Rank and low academic motivation would get higher scores on this function while students with high rank and motivation relative to measured achievement would get lower scores on the function (e.g., graduates of public secondary schools would tend to get lower scores than graduates of private schools).

Weights derived from the analysis were applied to the mean scores for Honors, Graduated, and Withdrawn groups at each college. The positions of

the several groups on the two discriminant functions are as shown in Figure 2, which also shows the weighting of the variables on each discriminant function. The positions of the various groups in the two dimensional graph indicate the nature of differences among and within the five colleges.

> At all five colleges, withdrawing groups appear to be about as able, or slightly more able, than Graduates, while Honors groups are superior to both Graduated and Withdrawn groups. [Note differences along the first discriminant function--the vertical dimension of the graph.]
>
> Variation along the second dimension is less pronounced (only 6 percent of differences is accounted for by this function) and is influenced by the relative proportions of public and private school graduates in the respective groups. Note that at each college, Honors groups tend to have lower scores than other groups on this dimension.
>
> In order to account for the much greater separation at Colleges D and H than at other colleges of Honors from Graduated and Withdrawn groups, it is necessary to consider differences among the colleges in the percentage of graduates awarded a degree with Honors. At College D and H only about 10 percent of the students were in the Honors Category, representing more selective internal procedures. Accordingly, Honors graduates are more distinctly separated from other groups at these colleges than at others.

In his studies of classes at Hollins a decade ago, Woods found that the likelihood of successful completion of college (i.e., persistence through graduation) varied with scores on the entrance variables (SAT-Verbal, SAT-Mathematical, CEEB English Achievement). The likelihood of graduation increased as test scores increased.

We have just seen that this relationship does not hold in more recent analyses. In considering the fact that graduation versus dropping out is no longer a function of students' academic qualifications, it is important to recall that the typical student entering Hollins in the Class of 1967 presented better SAT-Verbal scores and College Board Achievement scores than about 90 percent of her predecessors in the Class of '62 and that she compared even more favorably with earlier classes (cf. Figure 1 and related discussion).

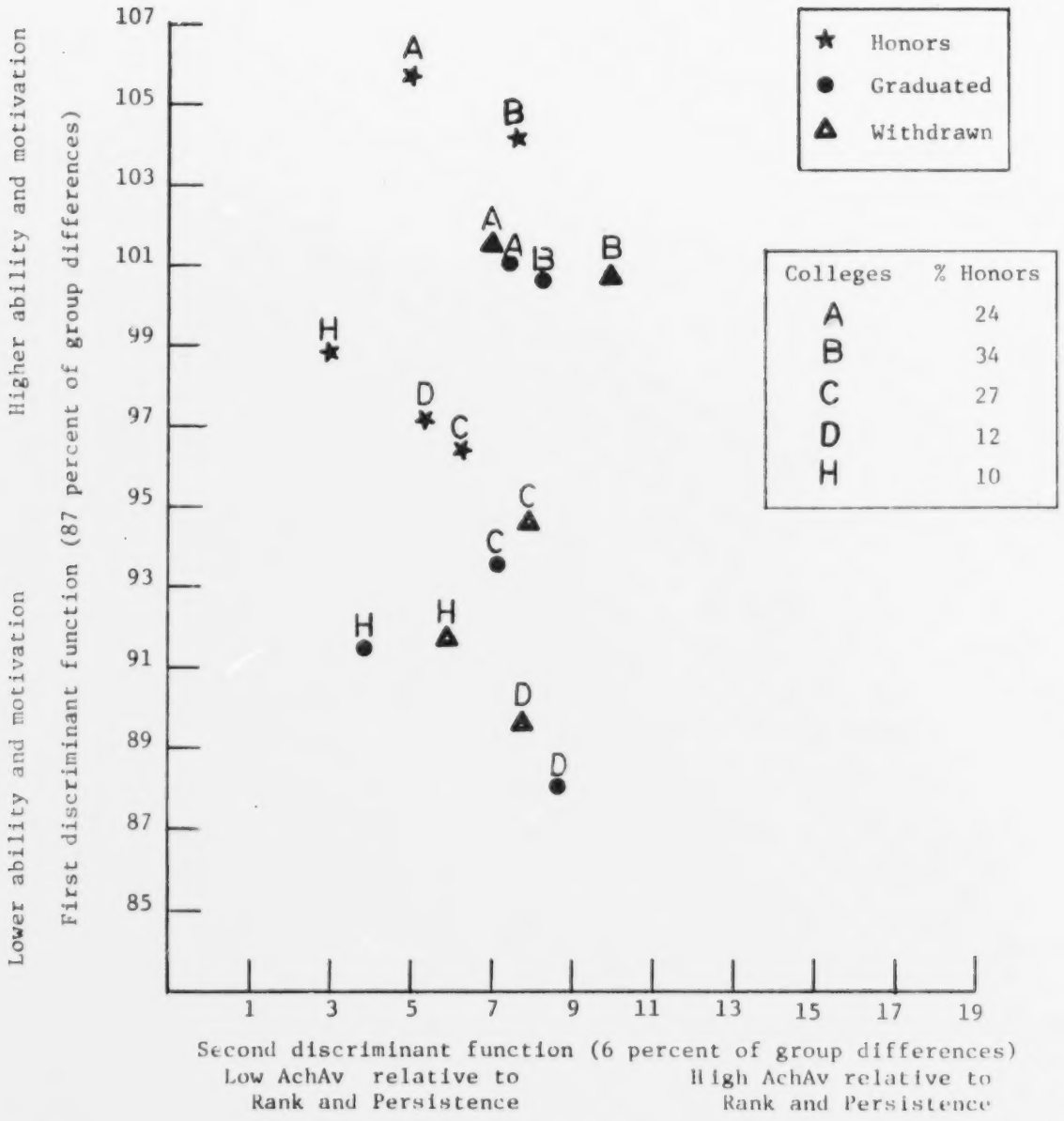


Figure 2. Discrimination among Graduating and Withdrawing Groups, Class of 1969, Five CRC-Member Colleges, by Two Linear Combinations of Seven Freshman-level Measures of Ability and Academic Motivation: Centroids of the Groups

Scaled weights--

Discriminant 1: .75 Rk + .37 SAT-V + .12 SAT-M + 1.00AchAv + .12 Pers + .39 D-SC + .09 Home

Discriminant 2:-.82 Rk + .09 SAT-V - .09 SAT-M + 1.00AchAv - .73 Pers + .03 D-SC - .12 Home

The higher concentration of more able and more academically-motivated students in later classes accounts, in part, for lower attrition rates and for attentuation of the relationship between ability and "survival" within a class. Is the recent increase in attrition in part a function of decreases in average tested ability and academic motivation in recent years? This possibility should be considered.

In any event, the critical importance of continuity of analysis of institutional-process variables and of relationships among variables is illustrated clearly in the present context.

V. Since 1964, CRC-member colleges have administered a comprehensive, multipurpose questionnaire, College Student Questionnaires, Part 1, ETS (CSQ), to each entering class. Use of a comprehensive survey makes it possible for a college to monitor trends in student characteristics and to study, systematically, relationships between student characteristics and educational outcomes, including graduation versus attrition.

Four subgroups in Hollins' Class of 1969 were identified, as follows:

Early withdrawals (freshman year),
Late withdrawals (sophomore year or thereafter),
Graduated with low grade point averages,
Graduated with honors.

Results of the 200-item freshman survey were tabulated for each of the foregoing groups. Average CSQ scale-scores were also derived, each CSQ scale based on a combination of responses to several related items with designations is given below:*

Motivation for Grades
Family Social Status
Independence from Family
Independence from Peers
Liberalism
Social Conscience
Cultural Sophistication

---

*For a description of the several scales, see Attachment CSQ, appended.

Higher scores on the scale indicate more "motivation for grades," higher social status (parent education, income), more independence and autonomy, more liberal attitudes on social and political questions, more concern over social injustices, and a higher degree of interest in culturally sophisticated activities (art, music, theatre, etc.) respectively.

A graphic summary of scale-score means for the four subgroups named above (Class of 1969) is provided in Figure 3. [A tabular supplement, Table D.69.1, summarizes responses of students in the four subgroups to selected items from CSQ Part 1. Responses to items making up the scales for Independence from Family, Independence from Peers, Liberalism, Social Conscience, and Cultural Sophistication are summarized on pages 9 - 13 of Table D.69.1. Items making up the Motivation for Grades scale are included on page 3 of D.69.1.]*

> Judging from their scale-score profiles, students who withdraw early differ from their counterparts who withdraw after completing two or more years in a variety of ways. Early dropouts also differ from graduating groups.
>
> Briefly, the typical "early withdrawer," as compared to all other subgroups, is characterized by a greater degree of autonomy vis-a'-vis family and peers, and a higher degree of cultural sophistication; only graduates with low grade point averages exhibit lower motivation for grades and lower social conscience.

These may be girls for whom adaptation to life in a residential college, characterized by a relatively high level of "community," and perhaps encouraging peer dependence, is difficult.

Graduates with low grade point averages exhibit the highest degree of peer dependence (i.e., low "independence from peers").

Honors graduates are most distinctively characterized by very high motivation for grades (this is true at all CRC-member colleges).

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*Not included in this abridged report.

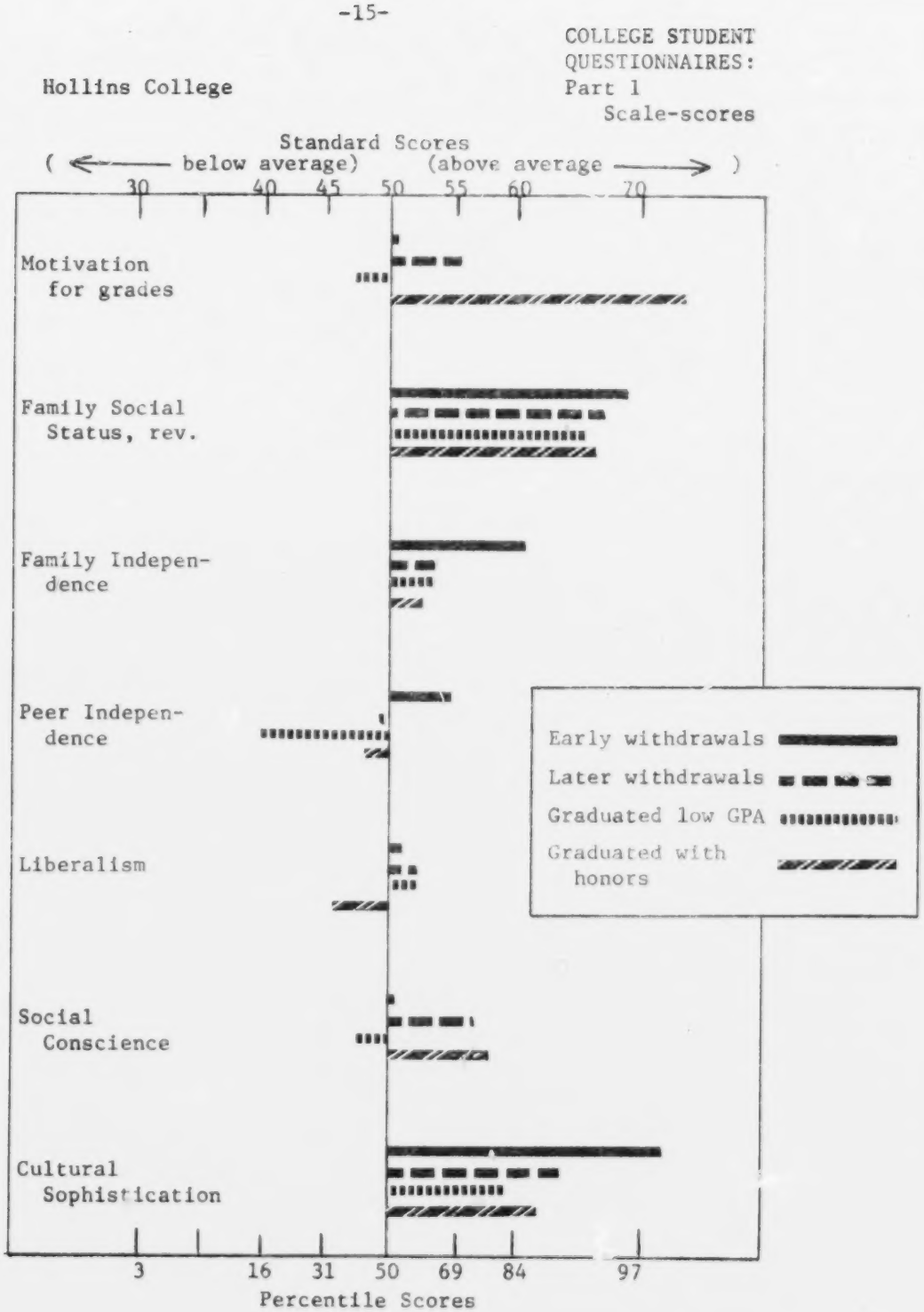


Figure 3. Mean Value of CSQ Scale-Scores for Selected Graduating and Withdrawing Groups, Hollins College, Class of 1969

COLLEGE RESEARCH CENTER AT ETS

PRINCETON, NEW JERSEY

To: Hollins College

From: College Research Center

Date: April 2, 1971

Subject: Notes on Attrition: Part 2

This memorandum continues an analysis of factors associated with attrition with special reference to Hollins College. The first memorandum dealt with evidence from previous studies of attrition at Hollins and other CRC-member colleges.* The present memorandum considers the results of analyses based on the Class of '72 in the context of findings from previous studies.

I. Attrition from the Class of '72 to date is approximately 35 percent (higher than for several previous classes):

Attrition was somewhat higher among high-achieving freshmen--among 61 students with Freshman Year Averages of 2.00 higher, attrition was 39.3 percent.

II. Average Predicted Grade Indices (old Hollins' scale) for the various dropout categories were as follows:

| | |
|---|---|
| All dropouts | 1.60 |
| All dropouts except those without notice** | 1.61 |
| Dropouts without notice | 1.52 |
| Early dropouts*** | 1.56 |
| Later dropouts with notice**** | 1.64 |

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*Notes on Attrition (CRC Memorandum, 12 February, 1971).

**"Without notice"--paid room deposit in spring, 1970, but did not return in fall.

***Freshman year

****"With notice"--did <u>not</u> pay room deposit in spring, 1970, thus signifying intention not to return.

III. Overall, some 46 percent of all Class-of-'72 dropouts, as compared to 32 percent theoretically expected, were either over- or under-achievers as freshmen--i.e., performed in a manner that was inconsistent with prediction.*

Among students who withdrew during or at the end of the freshman year (i.e., early withdrawals) 64 percent were either over- or under-achievers, as compared to only 32 percent theoretically expected.

The college should take careful note of the attitudes and behavior of over- and under-achieving students during the freshman year. The importance of this area was stressed in the Center's report on seniors in Hollins' Class of 1970.**

The report noted that seniors who were over-achievers as freshmen exhibited a higher level of satisfaction with faculty than their classmates who were under-achievers as freshmen. Over-achievers were also more satisfied with major field, reported more systematic study habits, and tended to be somewhat more involved in extracurricular activities than their under-achieving classmates. Responses to several specific items were as follows:

| Brief description of item | Seniors who were over-achievers as freshmen % | Seniors who were under-achievers as freshmen % |
|---|---|---|
| Expect to pursue graduate study | 77 | 43 |
| Teachers have been only somewhat successful in challenging (me) to work to capacity | 29 | 71 |
| Almost all faculty genuinely interested in students | 59 | 36 |

It was also noted that only 29 percent of the seniors who over-achieved as freshmen reported a cumulative average of less than B, as compared to 93 percent of their classmates who under-achieved during their first year at Hollins.

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*Actual freshman average differed from predicted average by at least 1 standard error of estimate; without regard to direction of the difference, theoretically, 32 percent of discrepancies are expected to be of this magnitude.

**The Class of '70 at Hollins College: Feedback from Seniors (CRC Memorandum, 31 August 1970)

Achievement and satisfaction with the college are interrelated and it is important to recognize that under-achieving freshmen may tend to be under-achieving and somewhat dissatisfied seniors (if they persist). The critical question for educational practice is whether or not this pattern can be significantly altered.

IV. Recent Center surveys of seniors at Vassar, Mount Holyoke, Briarcliff, and Randolph-Macon Woman's College reveal that up to 50 percent of graduating seniors seriously considered withdrawing from the college of original registration and that very few say they did not at least entertain this idea.*

Most of the serious thinking about withdrawing reportedly occurred during the sophomore year (as does most of the actual withdrawing). Withdrawing from college is thus something which is seriously considered by a majority of students in CRC-member colleges at some point during their undergraduate careers, typically during the first two years. The surveys revealed that relatively few of the seniors who seriously considered withdrawing kept their problems to themselves, although most resolved their problems without consulting a college administrator, counselor, or faculty member. Friends and relatives were more frequently consulted.

We do not know the patterns of consultation of students who actually withdraw. However, in a follow-up study of dropouts from Hollins, Mount Holyoke, R-MWC, Vassar, and Wheaton College during the early 1960's, very few respondents reported receiving more than "a little" counseling help in any area and very few indeed reported help with career-related problems, with personal-social problems, or with problems of post-college planning (presumably including plans for dealing with problems attendant upon withdrawal from the college of original registration.**

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*Student Attrition at CRC-Member Colleges (CRC Research Memorandum 70-1, 16 April 1970).

**Review of Center Studies: IV--Some Concomitants of Withdrawal from College (CRC Research Memorandum 67-1, 15 February 1967).

V. Attrition rates vary with region of the country from which students come. For Hollins' Class of '72 it is estimated that attrition for Virginia girls and for girls from the southeast other than Virginia is about 25 percent as compared to 40 plus percent among girls from the northeast, north central, and south central states.

More than half (53 percent) of the girls who withdrew early were from either the north central or northeastern states. Only about a fourth of persisting students with high freshman-year averages were from these regions.

In 1964 approximately 31 percent of all freshmen were from the northeast. This class (i.e., the Class of 1968) had the lowest attrition figure in recent years. Only about 25 percent of the Class of '72 was recruited from the northeast and this class has an unusually high attrition rate. The point is that lower proportionate enrollment of girls from "high-attrition regions" was not accompanied by a reduction in attrition. Other factors are involved, of course.

Knowledge of the location of a girl's home, as one element in a "dropout-prone syndrome," can be useful in counseling. Flagging records of entering students with particular syndromes of characteristics known to be associated with attrition can be a useful device as part of an institution-wide effort to combat attrition.

VI. Explication of the "withdrawal without notice" phenomenon is beyond the scope of this limited analysis. However, judging from their responses to CSQ Part 1, as freshmen, sophomore girls whose departure from Hollins was "without notice"--i.e., who paid their room deposit but failed to return in the fall--as compared to other groups studied tended to have been less certain about their educational and career plans. For example, only about half the "without notice" group, as compared to three-fourths or more of the other groups studied, indicated that they had at least a tentative choice of major field in mind. They were relatively more active than other groups in secondary school publications and student government and proportionately more of them wished to be remembered as "most popular."

The "without notice" dropouts were less closely identified with the academic or vocational-preparation aspects of college, tending to prefer either the "collegiate" or the "nonconformist" statements

of educational philosophy. Moreover, "general impression of campus and students" was cited as the major factor in college choice by almost three-fourths of this group. Only 29 percent of the high-achieving persisters cited this factor.*

We have seen that, as a group, they exhibited somewhat lower academic promise (PGI) than their classmates who withdrew as sophomores but who signified their intention to do so.

The student personnel records of these girls should be examined for evidence regarding the extent of participation in extracurricular activities, problems related to selection of a major field, and behavior indicative of increasing lack of identification with academic and non-academic aspects of college life--e.g., cutting classes to excess, poor mid-term record in spring semester, sophomore year, etc.

VII. It is assumed that a majority of withdrawing students continue their formal education elsewhere. In the last Center follow-up survey of dropouts from Hollins, Mount Holyoke, Sweet Briar, Vassar and Wheaton, it was found that about three-fourths of all respondents (two-thirds of Hollins' respondents) had transferred to another institution. It is important to know how many former students transferred as well as the institutions or types of institutions to which they transferred.

Follow-up surveys involving a brief questionnaire mailed to the latest address-of-record for dropouts should be made periodically.

For students who fail to pay a room deposit, inquiry as to their plans for the following fall should be made part of a routine set of "exit" procedures.

A survey including items such as those in the attachment might be made of dropouts from the Class of '72. Some of these items could also be adapted for inclusion in an "exit" questionnaire for students who indicate that they will not be returning.

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*Evidence regarding selected personal orientations of the several Class-of-'72 subgroups studied is provided in Figure 4, appended. CSQ Part 1 scale-score profiles are shown for (a) early withdrawals, (b) later withdrawals, with notice, (c) later withdrawals, without notice, and (d) high-performing persisters--i.e., returning juniors whose freshman-year average was 2.00 or better.

VIII. As part of a general effort to cope with the problem of attrition, the college should consider the following program of activities:

A. Maintain rosters of girls who withdraw, by Class, recording time of withdrawal, status at time of withdrawal, academic record.

B. Record on the special rosters requests from dropouts that transcripts be forwarded, indicating institution(s).

C. Ask instructors, residence counselors, etc. to re-examine their experience with students who have withdrawn for behavioral signs (cutting classes, problems in adjustment, etc.) which might constitute an "attrition-related syndrome."

D. Study the factors associated with the decision not to withdraw from Hollins among seniors who indicate that they seriously considered the possibility of withdrawing when they were freshmen or sophomores but did not do so.

E. Involve counselors and advisers of students, especially freshmen and sophomores, in a continuing effort to encourage students to discuss freely problems and issues with respect to which withdrawal from Hollins may be seen as part of a "solution."

F. All attrition is costly, unanticipated attrition especially so. All students, especially freshmen and sophomores, should be encouraged to file early notice of their plans for the next academic year on the grounds (a) that the college is interested in providing assistance to all students who may need help in their planning and (b) that the college needs information about students' educational interests and plans, including intention to transfer or re-enroll, in order to anticipate demands for dormitory space, courses, etc.

IX. We have seen evidence that most students today give serious thought to the possibility of leaving the college in which they originally enroll. "College ties" are less strong. The prospect of leaving the college of original registration, probably to continue one's education elsewhere, may well be less threatening for today's students than for their predecessors, because the idea is more generally acceptable. While we have no historical data on this matter for CRC-member colleges, some pertinent evidence is

supplied in Pervin's study of dropouts and non-dropouts from Princeton in the Classes of 1940, 1951, and 1960.*

> Pervin found that in the Class of 1940, only 13 percent of non-dropouts reported having considered withdrawal prior to graduation while in the Class of 1960, 44 percent so reported.

Moreover, responses of Princeton's dropouts to open-ended questions about the immediate and long-term effects of dropping out indicated that...

> by the Class of '60, more students indicate immediate positive effects of withdrawal, more indicate long-term positive effects, and more change from reports of immediate negative effects to reports of long-term positive effects. (p. 51)

In addition, Pervin reports that for the Classes of '40, '51, and '60, respectively, approximately 85 percent, 90 percent, and 95 percent of the entering Class eventually obtained the baccalaureate degree at Princeton or elsewhere. He estimated that 97 percent of dropouts returned to college, mostly elsewhere but increasingly to Princeton in the later Classes.

X. The educational desirability of certain types of educational discontinuity is being argued--interrupted patterns, time-out for some form of work experience, and the like. Moreover, Hollins and other colleges are making it possible through exchange and off-campus programs for students who wish to do so to take some of their formal undergraduate work at another college. In a recent survey of freshmen and seniors at Mount Holyoke College, 87 percent of seniors in the Class of '71 who responded agreed that "it is desirable from an educational point of view for college students to complete some of their work ...at another institution," while 85 percent of entering freshmen in the Class of '74 did so.

Where there is dissonance resulting from poor fit between a student's expectations and the realities of a given collegiate context, leaving the situation permanently should be a profitable solution for all involved. For many other "potential dropouts" it is possible that a temporary change of scene with planned return to the college of original registration might be the most profitable arrangement. There may be

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*Lawrence A. Pervin, "The Later Academic, Vocational, and Personal Success of College Dropouts," in Lawrence A. Pervin, Louis E. Reik, and Willard Dalrymple, (Eds.), The College Dropout and the Utilization of Talent, (Princeton, New Jersey: The Princeton University Press, 1966).

gain for the college in accepting a proposition of Pervin's, namely, that:

> Colleges have a responsibility to their dropouts: to help make sure that dropping out becomes a profitable rather than a traumatic experience for the student. This may involve help in finding another college to transfer to, or in suggesting steps to insure a successful return to the original college. In a more basic way, it involves the college's interest in the student's situation and in his future. (p. 62)

For the doubters among us, "Yes, Virginia, there is a Hawthorne effect."

Kenneth McNelson
4/2/71

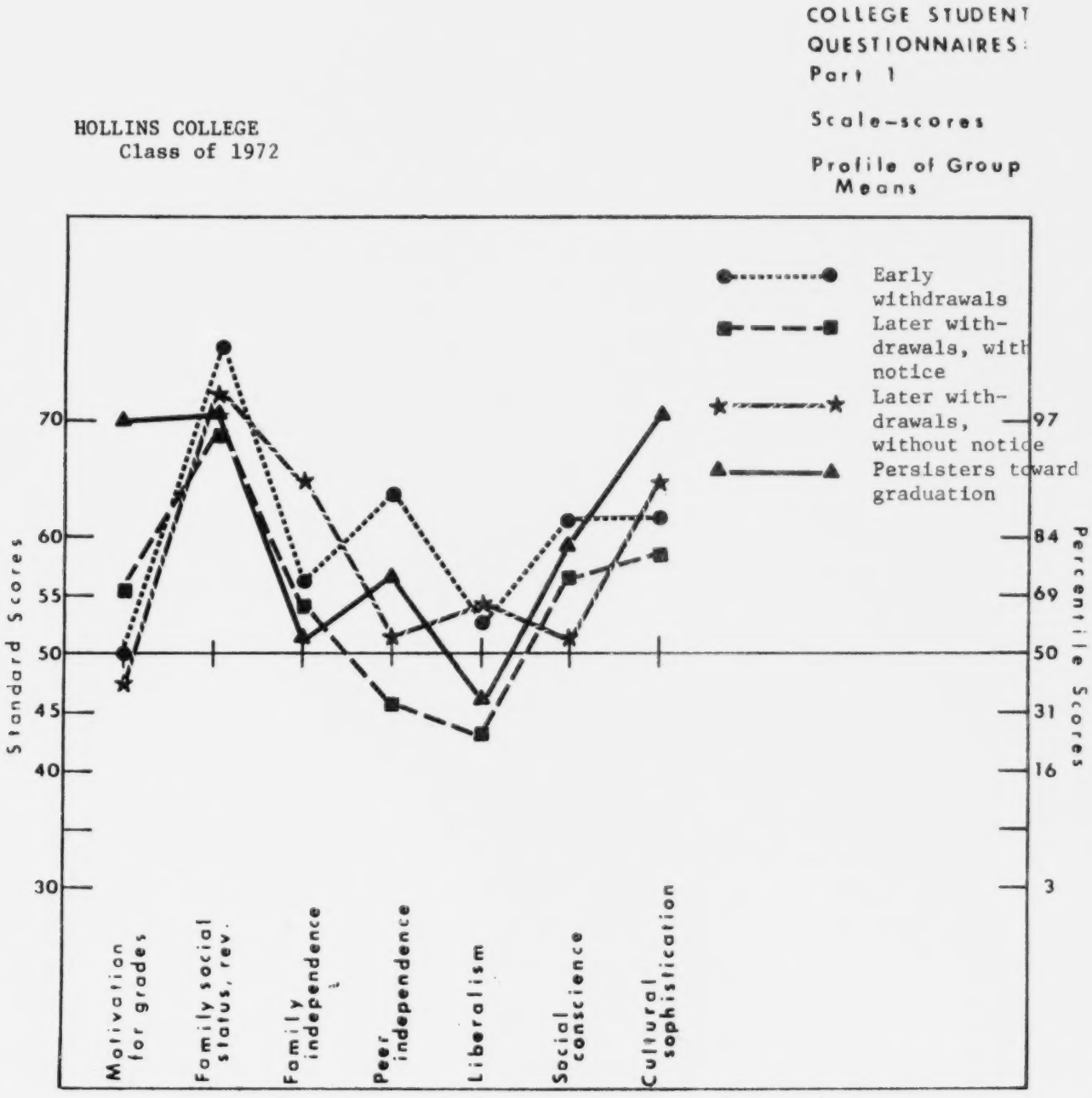


Figure 4. Profile of CSQ Scale-scores of Groups Withdrawing and Persisting Toward Graduation, Hollins College, Class of 1972

APPENDIX

ATTACHMENT: Memorandum, Hollins College April 2, 1971

Selected Survey Items Related to Attrition

A. Current educational status:

____ Enrolled in college working toward degree (_____)
Name of college or university

____ Enrolled in a specialized program or school (e.g., nursing, drama, etc.)

____ Not now enrolled in any formal educational program, but plan to continue toward my degree

____ Not now enrolled and do not plan to continue formal education

B. Present marital status:

____ Single

____ Married

____ Other

C. Present employment status:

____ Working full-time

____ Working part-time

____ Not working

D. When did you first seriously consider withdrawing from Hollins?

____ Planned to transfer from the outset

____ During first term, freshman year

____ Toward end of freshman year

____ During summer between freshman and sophomore year

____ During first-term, sophomore year

____ Toward end of sophomore year

____ During summer after sophomore year

E. Why did you decide to leave Hollins? Please indicate the extent to which each of the following factors frequently associated with withdrawal from college was important in your decision by checking the appropriate column.

| Factor | Very important | Involved but not decisive | Not involved |
|---|---|---|---|
| Desired subjects were not available | ____ | ____ | ____ |
| Wanted to be nearer home | ____ | ____ | ____ |
| Finances | ____ | ____ | ____ |
| Dissatisfied with the lack of coeducational atmosphere | ____ | ____ | ____ |
| To get married or be nearer fiance | ____ | ____ | ____ |
| Generally dissatisfied with the educational climate on campus | ____ | ____ | ____ |
| Wanted a change of atmosphere; believed it would be beneficial educationally and personally to complete program elsewhere | ____ | ____ | ____ |
| Was not doing as well academically as expected | ____ | ____ | ____ |
| Was attracted to another college which seemed to offer better opportunity for personal growth and development | ____ | ____ | ____ |
| Had planned from the outset to transfer after completing one or two years | ____ | ____ | ____ |
| Lack of recreational and cultural outlets in the vicinity of the college | ____ | ____ | ____ |

F. Please elaborate briefly your reasons for deciding to withdraw:

_____

_____

_____

_____

G. With whom did you discuss the pros and cons of withdrawing from the college? Check all applicable items.

____ Discussed the idea with no one

____ Parent(s)

____ Close friend(s)

____ Adviser, counselor

____ Dean(s)

____ College physician

____ Member of the faculty

____ Fiance

____ Other (Please indicate briefly other)

H. Circumstances permitting, at the time you decided to leave Hollins would you have preferred to remain at Hollins and complete your degree program?

____ Yes, definitely

____ Definitely not

I. Listed below are several areas with respect to which colleges may be compared. Please indicate your impression of differences between Hollins and the college or university in which you are now enrolled in each area, as follows:

1. Encircle "1" if you believe that your current institution is favored in the comparison.
2. Encircle "2" if Hollins is favored in the comparison.
3. Encircle "3" if you believe that the two institutions are equal in regard to the factor involved.
4. Encircle "4" if you have no opinion.

| Factor | Present college favored | Hollins favored | Both about same | No opinion |
|---|---|---|---|---|
| Costs | 1 | 2 | 3 | 4 |
| Location relative to home | 1 | 2 | 3 | 4 |
| Sense of community | 1 | 2 | 3 | 4 |
| Variety of curricular offerings, general | 1 | 2 | 3 | 4 |
| Variety of curriculum in my major field | 1 | 2 | 3 | 4 |
| Proximity to a major city or off-campus recreational outlets | 1 | 2 | 3 | 4 |
| Size of college | 1 | 2 | 3 | 4 |
| Intellectual challenge in courses and classes | 1 | 2 | 3 | 4 |
| Intellectual interests of fellow students | 1 | 2 | 3 | 4 |
| Mix of students on campus: backgrounds, attitudes, liberal/conservative types (without regard to sex) | 1 | 2 | 3 | 4 |
| Sex-composition of student body | 1 | 2 | 3 | 4 |
| Accessibility of faculty for out-of-class consultation on courses | 1 | 2 | 3 | 4 |
| Flexibility and informality in relationships between students and faculty | 1 | 2 | 3 | 4 |
| Flexibility and informality in relationships among students | 1 | 2 | 3 | 4 |
| Range and vigor of organized extracurricular activities | 1 | 2 | 3 | 4 |
| Opportunities for informal social and recreational activities on campus, general | 1 | 2 | 3 | 4 |
| Student participation in college governance | 1 | 2 | 3 | 4 |
| General morale and esprit among students | 1 | 2 | 3 | 4 |
| Library facilities, general | 1 | 2 | 3 | 4 |
| Library facilities, in major field | 1 | 2 | 3 | 4 |
| Laboratory facilities | 1 | 2 | 3 | 4 |
| Living arrangements, generally speaking | 1 | 2 | 3 | 4 |
| Balance in emphasis on the academic and nonacademic aspects of the college experience | 1 | 2 | 3 | 4 |

4/16/71

MEMO TO: Attrition Study Committee, Hollins College

FROM: Paul J. Woods, Hollins College

RE: Preliminary Notes on Attrition Report (based on verbal report to the Committee on April 14)

These are some observations and general impressions obtained from a survey of numerous reports from the College Research Center regarding the increase in attrition observed at Hollins College in recent years. Following a period of decline, the withdrawal pattern of recent classes at the college has shown a marked upsweep: from a low point of 23.3% withdrawal for the class of 1968 there was a marked jump to 31.9% for 1969 and 31% for 1970. At this point, we can predict that the class of 1972 might reach 35% withdrawals. Even though this figure does not yet approach the 47% withdrawal that we observed in the early 1960's, it is cause for some concern. The fact that this may be part of a general trend is indicated by an increase in the percentage of students in CRC member colleges who indicate that they might transfer at some time during their college career. However, the trend has not yet become a reality for the other institutions. In fact, some of the colleges are still showing somewhat of a decline in their withdrawal percentages (for example, Randolph-Macon Women's College has declined from 41%-43% in 1966 and 1967 down to about 39% for 1969 and 1970; Wheaton College has declined from 35% in 1966 down to less than 24% in 1970 and Mount Holyoke has declined from 20.6% in 1966 down to 14.4% in 1970.)

Unless we take compensatory steps to increase the applicant population and/or attract transfer students from other institutions to Hollins, then this trend that we are experiencing is cause for serious concern. And even if one adopts the position that attrition itself is not bad (that is, from the point of view of the individual it might be to her best advantage to change

to another institution), we still must take some action due to the financial situation that attrition creates. But the position that we will take is that, from our point of view, attrition is undesirable. We would like to attract students to Hollins College who will remain here throughout their four years. To achieve these ends, there are various modes of attack which include (1) a change in our selection procedures so as to not accept students with a "dropout-prone syndrome," (2) change in faculty, administrative or curriculum, or (3) a counseling intervention program with an attempt to deter transfers. Given the realities of the size of the existing applicant population, the first alternative does not seem at all realistic. Changes in the second category seem unnecessary since the data clearly indicate that there already is high satisfaction with both the faculty and administration. Hence, we come to the conclusion that an emphasis on counseling--particularly in the freshman year, but also into the sophomore year--is the most feasible and realistic area for us to work in. This is supported by the fact that our students have reported a dissatisfaction with assistance in their educational and vocational plans.

Before proceeding further, there is one aspect of our situation here which deserves very careful scrutiny and monitoring. There is increasing dissatisfaction throughout the CRC colleges with the single-sex orientation. For hollins, in particular, it should be noted that there is a decline in the percentage of entering freshmen who would choose another woman's college if a second choice were required. This figure was 56% in 1966 and it has dropped to 46% in 1969. Also, in the feedback from the seniors who graduated in 1970, we find 47% saying that they were somewhat or very dissatisfied with the sex-composition of our student body; this should be contrasted with 39% who said the same thing in the class of 1968. A continued trend in this direction will serve to seriously cut into our potential applicant population.

One point to make clear is that the withdrawals are not academic failures. At Hollins, as well as at four other colleges studied, the withdrawing groups appeared to be about as able, or even slightly more able, than the general graduating group when honors students were eliminated. They are leaving for various sorts of personal dissatisfactions rather than for academic difficulties.

With these general observations as an introduction, we will make the following specific points derived from the various reports and materials supplied by the CRC office:

1. Over the last four years, there are increasingly higher percentages of students entering CRC-member colleges who are saying that their chances of transferring to another college are "very good." For Hollins, these figures have shown the following trend: 10% for 1967, 8% for 1968, 13% for 1969, and 17% for 1970.
2. A fact that might be contributing to student dissatisfaction is that while the academic qualifications of entering students at Hollins have increased steadily up until very recent years, this improvement has not been followed by an increase in assigned grades for work in courses or an increase in the proportion of a given class which is awarded degrees with honors. "In terms of verbal ability and measured achievement, for example, the typical student in the class of 1967 was better qualified than almost 90% of her predecessors in the class of 1962 yet she earned about the same grade during her freshman year. The cumulative effect of continued increases in grading standards may well be a factor in the increasing resistance of students in selective colleges to traditional grading practices."
3. "Center studies of attrition in classes of several years ago provide a basis for several generalizations about the relationship between students' academic qualifications and attrition. (1) Within a college,

the likelihood of a student graduating on schedule with her class does not appear to be a function of her academic aptitude and level of measured achievement in secondary school subjects. (2) Among colleges, graduation rates tend to be at least partially a function of general level of academic aptitude and achievement in the student body--graduation rates tend to increase as general aptitude level of the student body increases. (3) Among graduating groups within each college, students with superior records of academic accomplishment tend to be distinctly superior in all elements of the admissions battery to their lower-achieving classmates or to their classmates who withdraw. However, dropouts tend to have better 'admissions-battery qualifications' than their classmates who persist through graduation but with relatively low academic records."

Since in recent years we have experienced a decline in average tested ability and academic motivation, the above facts then might explain the increase in attrition which we are now experiencing.

4. On scales derived from the College Student Questionaires, we find that the early withdrawals, that is those who withdraw during or right after the freshman year, show a greater degree of independence--both from family and peers. (This is really not surprising, it might even tend to validate the questionaire.)
5. As mentioned, attrition from the class of '72 is approximately 35% to date. Attrition was somewhat higher among the high-achieving freshmen--among 61 students with freshman year averages of 2.0 or higher, the attrition was 39.3%.
6. "Overall, some 46% of the class of '72 dropouts, as compared to 32% theoretically expected, were either over- or under-achievers as freshmen--that is, performed in a manner that was inconsistent with prediction. Among students who withdrew during or at the end

of the freshman year (early withdrawals), 64% were either over- or under-achievers, as compared to only 32% theoretically expected. (These groups are easily identified during the freshman year and should, therefore, become the target of a counseling intervention program.)

"The College should take careful note of the attitudes and behavior of over- and under-achieving students during the freshman year. The importance of this area was stressed in the Center's report on seniors in Hollins Class of 1970. The report noted that seniors who were over-achievers as freshmen exhibited a higher level of satisfaction with the faculty than their classmates who were under-achievers as freshmen. Over-achievers were also more satisfied with major field, reported more systematic study habits, and tended to be somewhat more involved in extracurricular activities than their under-achiever classmates. Achievement and satisfaction with the college are interrelated and it is important to recognize that under-achieving freshmen may tend to be under-achieving and somewhat dissatisfied seniors (if they persist)."

7. Recent Center surveys of some of the CRC colleges reveal that "up to 50% of graduating seniors seriously consider withdrawing from the college of original registration and that very few say they did not at least entertain this idea. Most of the serious thinking about withdrawing reportedly occurred during the sophomore year (as does most of the actual withdrawing). Withdrawing from college is thus something which is seriously considered by a majority of students in CRC-member colleges at some point during their undergraduate careers, particularly during the first two years. The surveys revealed that relatively few of the seniors who seriously considered withdrawing kept their problems to themselves, although most resolve

their problems without consulting a college administrator, counselor or faculty member. Friends and relatives were more frequently consulted."

8. "Attrition rates vary with region of the country from which students come. For the Hollins class of '72, it is estimated that attrition for Virginia girls and for girls from the Southeast, other than Virginia, is about 25% as compared to 40+% among girls from the Northeast, Northcentral, and Southcentral states. More than half (53%) of the girls who withdrew early were from either the Northcentral or Northeastern states. Knowledge of the location of the girls' homes, as one element in a 'dropout-prone syndrome,' can be useful in counseling. Flagging records of entering students with particular syndromes of characteristics known to be associated with attrition can be a useful device as part of an institution-wide effort to combat attrition."

9. "As part of a general effort to cope with the problem of attrition, the college should consider the following program of activities:

   A. Maintain rosters of girls who withdraw, by Class, recording time of withdrawal, status at time of withdrawal, academic record.

   B. Record on the special rosters requests from dropouts that transcripts be forwarded, indicating institution(s).

   C. Ask instructors, residence counselors, etc. to re-examine their experience with students who have withdrawn for behavioral signs (cutting classes, problems in adjustment, etc.) which might constitute an "attrition-related syndrome."

   D. Study the factors associated with the decision not to withdraw from Hollins among seniors who indicate that they seriously considered the possibility of withdrawing when they were freshmen or sophomores but did not do so.

E. Involve counselors and advisors of students, especially freshmen and sophomores, in a continuing effort to encourage students to discuss freely problems and issues with respect to which withdrawal from Hollins may be seen as part of a "solution."

F. All attrition is costly, unanticipated attrition especially so. All students, especially freshmen and sophomores, should be encouraged to file early notice of their plans for the next academic year on the grounds (a) that the college is interested in providing assistance to all students who may need help in their planning and (b) that the college needs information about students' educational interests and plans, including intention to transfer or re-enroll in order to anticipate demands for dormitory space, courses, etc."

Brief Description of Scales, CSQ from Richard E. Peterson, Technical Manual, College Student Questionnaires, (Princeton, New Jersey: Educational Testing Service, 1965), pp. 16-18.

(SF)

Satisfaction with Faculty refers to a general attitude of esteem for instructors and the characteristic manner of student-faculty relationships at the respondent's college. Students with high scores regard their instructors as competent, fair, accessible, and interested in the problems of individual students. Low scores imply dissatisfaction with faculty and the general nature of student-faculty interaction.

(SA)

Satisfaction with Administration is defined as a generally agreeable and uncritical attitude toward the college administration and administrative rules and regulations. High scores imply satisfaction with both the nature of administrative authority over student behavior and with personal interactions with various facets of the administration. Low scores imply a critical, perhaps contemptuous view of an administration that is variously held to be arbitrary, impersonal, and/or overly paternal.

(SM)

Satisfaction with Major refers to a generally positive attitude on the part of the respondent about his activities in his field of academic concentration. High scores suggest not only continued personal commitment to present major field, but also satisfaction with departmental procedures, the quality of instruction received, and the level of personal achievement within one's chosen field. Low scores suggest an attitude of uncertainty and disaffection about current major field work.

(SS)

Satisfaction with Students refers to an attitude of approval in relation to various characteristics of individuals comprising the total student body. High scores suggest satisfaction with the extent to which such qualities as scholastic integrity, political awareness, and particular styles and tastes are perceived to be characteristic of the student body. Low scores imply disapproval of certain characteristics that are attributed to the overall student body.

(SH)

Study Habits refers to a serious, disciplined, planful orientation toward customary academic obligations. High scores represent a perception of relatively extensive time devoted to study, use of systematic study routines and techniques, and a feeling of confidence in preparing for examinations and carrying out other assignments. Low scores suggest haphazard, perhaps minimal, attempts to carry through on instructional requirements.

(EI)

Extracurricular Involvement is defined as relatively extensive participation in organized extracurricular affairs. High scores denote support of and wide involvement in student government, athletics, religious groups, preprofessional clubs, and the like. Low scores represent disinterest in organized extracurricular activities.

CSQ Scales (cont'd)

(FI)

Family Independence refers to a generalized autonomy in relation to parents and parental family. Students with high scores tend to perceive themselves as coming from families that are not closely united, as not consulting with parents about important personal matters, as not concerned about living up to parental expectations, and the like. Low scores suggest "psychological" dependence on parents and family.

(PI)

Peer Independence refers to a generalized autonomy in relation to peers. Students with high scores tend not to be concerned about how their behavior appears to other students, not to consult with acquaintances about personal matters, and the like. They might be thought of as unsociable, introverted, or inner-directed. Low scores suggest conformity to prevailing peer norms, sociability, extraversion, or other-directedness.

(L)

Liberalism is defined as a political-economic-social value dimension, the nucleus of which is sympathy either for an ideology of change or for an ideology of preservation. Students with high scores (liberals) support welfare statism, organized labor, abolition of capital punishment, and the like. Low scores (conservatism) indicate opposition to welfare legislation, to tampering with the free enterprise system, to persons disagreeing with American political institutions, etc.

(SC)

Social Conscience is defined as moral concern about perceived social injustice and what might be called "institutional wrongdoing" (as in government, business, unions). High scorers express concern about poverty, illegitimacy, juvenile crime, materialism, unethical business and labor union practices, graft in government, and the like. Low scores represent reported lack of concern, detachment, or apathy about these matters.

(CS)

Cultural Sophistication refers to an authentic sensibility to ideas and art forms, a sensibility that has developed through knowledge and experience. Students with high scores report interest in or pleasure from such things as wide reading, modern art, poetry, classical music, discussions of philosophies of history, and so forth. Low scores indicate a lack of cultivated sensibility in the general area of the humanities.

(MG)

Motivation for Grades refers to a relatively strong desire--retrospectively reported--to earn good marks in secondary school. High MG scores represent the respondent's belief that others (e.g., teachers, classmates) regarded him as a hard worker, that the respondent, in his own estimation, studied extensively and efficiently, was capable of perseverance in school assignments, and considered good grades to be personally important. Low scores indicate lack of concern for high marks in secondary school.

(FS)

Family Social Status is a measure of the socioeconomic status of the respondent's parental family. The scale is comprised of 5 questions, each having 9 scaled alternatives. The 5 items have to do with: father's occupation, father's education, mother's education, family income, and father's nationality-ethnic background. Father's occupation is given a weight of 3. Raw scores may range from 7 through 63. [Since 1968, the item on father's nationality-ethnic background has not been included in calculation of this score].